

General Principles - Cawelo Water District & Landowner
Groundwater Recharge and Banking Program
December 10, 2020

1. Both Cawelo Water District (Cawelo) and district landowners understand the importance of maximizing the importation of surface water into the district area for the beneficial use by agriculture, sustaining groundwater resources, water storage, and maintaining a local productive agricultural industry.
2. During wet years or years when surplus surface water is available, Cawelo endeavors to acquire as much water as reasonably possible and deliver the water for direct irrigation or to groundwater recharge and banking facilities. Generally, available surplus water is from the Kern River, Poso Creek, SWP Article 21, and Friant 215.
3. The Sustainable Groundwater Management Act (SGMA) was signed into California law on September 16, 2014 and requires governments and water agencies to address groundwater sustainability.
4. Cawelo and district landowners are concerned about the impact SGMA and GSPs will have on industries that rely on groundwater, especially agriculture, and desire to establish a groundwater recharge and banking program that will benefit both Cawelo and its landowners.
5. Cawelo has existing groundwater recharge facilities and existing groundwater banking programs for itself and in cooperation with other water districts. Cawelo has existing groundwater bank accounts. Cawelo also desires to expand its groundwater recharge and banking capacity by constructing additional facilities and/or by gaining access to non-district owned land or facilities.
6. Some Cawelo Landowners have met with Cawelo to discuss potential landowner recharge and banking programs. They desire to have a direct groundwater banking program available to them within Cawelo such that it provides them the capability to bring surplus water into Cawelo for groundwater storage and later extraction.
7. It is acknowledged that groundwater banking activities and potential associated extraction or account balances may potentially be impacted or modified by future Groundwater Sustainability Plans (GSPs).
8. Cawelo is considering developing a voluntary local groundwater recharge and banking program with its landowners on the following principles:
 - a. Neither Cawelo's allocated surface water provided to or made available to Cawelo Landowners, nor the water provided under the winter water program shall be used in this program.
 - b. Unused capacity in Cawelo owned recharge facilities would be made available to Cawelo Landowners for the purpose of recharging groundwater and banking Landowner owned (non-Cawelo) surface water. Cawelo would maintain first priority use of all of its facilities and have sole discretion to make a final determination on landowner access. Cawelo facilities include but are not limited to recharge basins, canals, pipelines, turnouts and pumps.
 - c. Landowners with sufficient land in Cawelo and satisfactory geotechnical properties can choose to construct recharge basins for the purposes of participating in this proposed program. These recharge basins would be fully owned by the landowners with the intent to store surplus surface water for future extraction. Landowners would have first priority for the use of their recharge basins to bank Landowner (non-Cawelo) surface water. Landowners would have to work with Cawelo to schedule water delivery through the Cawelo distribution system.
 - d. As an alternative to typical groundwater recharge and banking facilities that utilize surface basins to percolate

water into the ground, Cawelo may consider other methods of direct recharge to groundwater or surfacewater storage for participation in this program. As with any recharge facility, Cawelo, at its sole discretion will determine the appropriateness of such facilities for participation in the program.

- e. Cawelo would be granted secondary priority use of the Landowner recharge facilities to bank Cawelo water. Landowners would have sole discretion to make a final determination on Cawelo access with the understanding that Landowners would not withhold access for undue reasons. Cawelo may choose to use a Landowner's property or not to use such property, at Cawelo's sole discretion.
- f. Each party is responsible and liable for the construction, operation, maintenance, and repair of their respective facilities.
- g. The Landowner shall consult with Cawelo regarding potential recharge facility location and design to determine appropriateness of the recharge facility. Primary criteria used to assist in such determination shall be a desired target water percolation efficiency of 90%. Efficiency will be calculated by dividing the evaporation losses by the percolation rate and multiplying that value by 100. Other factors to consider may include, but shall not be limited to vicinity to structures, potential groundwater quality impacts, water transportation difficulty or other criteria deemed appropriate by Cawelo.
 - i. Evaporation Rates – A monthly evaporation rate table will be established based on information from established reports such as DWR's Evaporation From Water Surfaces in California, October 1959 or DWR's published Appendix D, Summary of Observed Monthly Evaporation Rates Southern San Joaquin Valley, 1992-1996. Generally worse case evaporation rate is 10 inches for the month of July.
 - ii. Percolations rates will be determined by using the EPA Falling Head Percolation Test or equivalent.
 - iii. The attached Soil Percolation Map serves as a general guide for the potential areas appropriate for recharge facilities. Additional verification and testing may be required by Cawelo.
 - iv. Other factors will need to be considered on a case by case basis.
- h. Cawelo will have the right to inspect and approve any Landowner recharge facility for participation in the program based on criteria, such as size, location in relationship to Cawelo transportation facilities, soil type, construction, and any other relevant matters. Landowners will be required to construct their recharge facilities to effectively and safely retain water within their recharge basin or percolation system. Landowners will be required to protect surrounding lands from adverse impacts and indemnify the District for any damages. Recharge facilities will require sufficient percolation properties per (g) and Cawelo may require appropriate additional testing. Landowner would be required, in the design, construction, maintenance, repair, and operation of the Landowner Banking Facilities and appurtenances, to consider, follow, and comply with all applicable state, federal, and local laws and regulations, including but not limited to those pertaining to environmental protection and the protection of endangered and threatened species and their habitat, and obtain any necessary approvals or permits.
- i. After consideration of the various criteria described in (g) and (h) above, Cawelo may choose to use a Landowner's recharge facility or not to use such facility in Cawelo's sole discretion.
 - i. In the event there is insufficient water volume or the capacities of Cawelo's delivery system to deliver water to all participating lands, distribution of water to different facilities will be based on the criteria stated in (g) and (h) above, recharge capacities, operational issues, and any other

factor deemed appropriate by the District.

- j. In the event that multiple Landowners request to use Cawelo's recharge facilities and recharge capacities are limited, available capacities beyond Cawelo's own use will be apportioned among the number of participating Landowners that desire to bank water, depending upon timing, quantity, and quality of supplies, and any other factor deemed appropriate by the District.
- k. Water delivered to any recharge facility will have no other purpose or intent than to percolate for groundwater recharge and banking for later extraction/beneficial use. This water shall not be used to simultaneously irrigate crops or to provide for pre-irrigation of crops. Typical recharge basins will be constructed for the sole purpose to percolate water and shall not be actively farmed or have any agricultural operations. Essentially, surface recharge basins must be open, unfarmed fallow land, except as may otherwise be allowed under special circumstances.
- l. Cawelo will oversee, schedule and maintain records of all water delivered into Cawelo Water District for groundwater recharge and banking per terms of any landowner recharge program agreement.
- m. It is the responsibility of the Landowner to deliver Landowner water intended for recharge and banking to the Cawelo district boundary. Landowner will be responsible for all costs and losses associated with acquiring, obtaining any necessary environmental approvals, and conveying Landowner water to Cawelo. Water deliveries to Cawelo are required to be approved by and scheduled with Cawelo. Although all aspects of delivery of Landowner water is ultimately the responsibility of the Landowner, Cawelo will make reasonable efforts to assist with delivery of Landowner water provided that such deliveries shall not interfere with Cawelo water supplies, its deliveries, its finances, or any water management program(s).
- n. Landowner is responsible for all transportation costs and losses associated with conveying Landowner (non-Cawelo) surface water through the Cawelo distribution system to any recharge basin in Cawelo. Transportation costs may include, but not limited to, pumping costs, proportional maintenance costs and staff's time. Cawelo will make reasonable efforts to assist with delivery of Landowner water provided that such deliveries shall not interfere with Cawelo water supplies, its deliveries, its finances, or any water management program(s).
- o. Cawelo is responsible for all transportation costs and losses associated with delivering Cawelo water to any recharge basin in Cawelo.
- p. Point of delivery to recharge facilities is the Cawelo owned metered turnout. If one does not exist, the landowners can request Cawelo to install a new metered turnout. If Cawelo installs the turnout, the landowner is responsible for all associated costs of the installation. If additional facilities are necessary then Landowner would also be responsible for those associated costs. The recharge facility owner assumes all responsibility and liability for the recharge water after the Point of Delivery and will hold the other party harmless for any damage or harm.
- q. For any Landowner (non-Cawelo) surface water legally diverted and delivered into a Landowner owned recharge basin, the landowner shall be credited with 90% of the volume of water that has percolated into the ground. The remaining 10% of percolated water will be credited to Cawelo (for the benefit of itself and its landowners). Percolation volumes will be based on meter volumes measured at Point of Delivery less evaporation losses per the evaporation table.
- r. For any Landowner (non-Cawelo) surface water delivered into a Cawelo owned recharge basins, the landowner shall be credited with 75% of the volume of water that has percolated into the ground. The remaining 25% of percolated water will be credited to Cawelo (for the benefit of itself and its landowners). Percolation volumes will be based on meter volumes measured at Point of Delivery less evaporation losses per the evaporation table.

- s. For any Cawelo surface water delivered into a Landowner owned recharge basins, Cawelo shall be credited with 75% of the volume of water that has percolated into the ground. The remaining 25% of percolated water will be credited to the Landowner. Percolation volumes will be based on meter volumes measured at Point of Delivery less evaporation losses per the evaporation table.
- t. Landowner owned stored surface water within this program can only to be used and transferred within Cawelo boundaries, provided however up to 25% of the stored water "account" credit can be transferred outside of Cawelo boundaries to an adjacent District or to lands adjacent to Cawelo, but only if the transfer amount is in excess of the Landowner's crop water requirements within Cawelo. Account transferability will be subject to SGMA GSPs and any credit transfers will be scheduled with Cawelo for accounting purposes only.
- u. Actual Landowner extraction of banked physical water will be scheduled with Cawelo for accounting purposes only and account balances will be adjusted accordingly. Extracted program water can only be used within Cawelo boundaries and exportation of actual water is prohibited. This program provides no rights to access another party's extraction facilities.
- v. Each recharge facility owner may determine if the proposed banking surface water supply is of sufficient quality to be delivered into the recharge facility, and upon delivery of such water into the facility, the recharge facility owner waives, relinquishes, and holds the owner of such water free and harmless from any and all claims of any nature whatsoever regarding the quality of such delivered water. Generally, acceptable water quality is water quality, at a minimum, that is equivalent to water quality of agricultural irrigation supplies typically provided within Cawelo.
- w. Parties agree they will not make any future claims on the provided surface water other than as provided under the provisions and terms of an executed program agreement. Additionally, parties agree they will not make any future claims on the other parties' facilities.
- x. Any costs associated with potential extraction and transportation operations conducted by Cawelo on behalf of the Landowner will be the sole responsibility of the Landowner. Cawelo will maintain priority use of all of its facilities and at its sole discretion, will determine any secondary use. Parties have no obligation to extract or transport stored water on behalf of the other party.
- y. District staff will be responsible for monitoring and reading the turnout meters regarding program water.
- z. Parties may curtail or suspend delivery of water under this program at any time for any cause, at their sole discretion.
- aa. Any program agreement or the terms contained therein are for the benefit of the parties to such agreement(s) and are not assignable or transferrable without the written consent of the other party. Accounts for stored water can be transferred to other landowners within Cawelo provided both the transferring and receiving landowner(s) to the terms of water usage and transferability of the landowner banking agreement, and any other relevant provisions of the program, which may be subject to SGMA.
- bb. The District may consider any other circumstances deemed necessary or appropriate, and the Program parameters may be changed from time to time, as determined by the District.
- cc. Where the provisions of these principles provide for action to be based upon opinion, judgment, approval, review, or determination of any person or entity, such provisions are not intended to be and shall not be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.